[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2016-5459; Directorate Identifier 2015-NM-148-AD]

**RIN 2120-AA64** 

**Airworthiness Directives;** Bombardier, Inc. Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes. This proposed AD was prompted by a design review, which found that the burst pressure of the flexible hose used to vent oxygen from the high-pressure relief valve of the oxygen cylinder overboard is lower than the opening pressure of the high-pressure relief valve. This pressure difference could cause the flexible hose to burst before it is able to vent excess oxygen overboard. This proposed AD would require replacement of flexible relief hoses for the crew oxygen bottles with new metal design relief hoses. We are proposing this AD to prevent the accumulation of excess oxygen in an enclosed space, which could, if near a source of ignition, cause an uncontrolled oxygen-fed fire.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
   Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
   20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; Internet http://www.bombardier.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-5459; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations

office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office (ACO), 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7303; fax 516-794-5531.

#### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-5459; Directorate Identifier 2015-NM-148-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

#### Discussion

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2015-25, dated

September 10, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes. The MCAI states:

A design review found that the burst pressure of the flexible hose used to vent oxygen from the high-pressure relief valve of the oxygen cylinder overboard is lower than the opening pressure of the high-pressure relief valve. This could cause the flexible hose to burst before it is able to vent the excess oxygen overboard. If an ignition source is present, the accumulation of oxygen in an enclosed space may result in an uncontrolled oxygen-fed fire.

This [Canadian] AD mandates the replacement of the oxygen [flexible] hose assembly with a new design oxygen [metal] hose assembly.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-5459.

#### Related Service Information under 1 CFR part 51

Bombardier, Inc. has issued the following service information:

- Service Bulletin 700-35-013, Revision 01, dated July 22, 2015;
- Service Bulletin 700-35-5001, Revision 01, dated July 22, 2015;
- Service Bulletin 700-35-6001, Revision 01, dated July 22, 2015; and
- Service Bulletin 700-1A11-35-012, Revision 01, dated July 22, 2015.

The service information describes procedures to replace the flexible oxygen hoses with metal hoses. This service information is reasonably available because the interested

parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

## FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

# **Costs of Compliance**

We estimate that this proposed AD affects 73 airplanes of U.S. registry.

We also estimate that it will take about 3 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$14,483 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$1,075,874, or \$14,738 per product.

According to the manufacturer, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all costs in our cost estimate.

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

#### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

- 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

# List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

# **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Bombardier, Inc.:** Docket No. FAA-2016-5459; Directorate Identifier 2015-NM-148-AD.

## (a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

# (b) Affected ADs

None.

## (c) Applicability

This AD applies to Bombardier, Inc. Model BD-700-1A10 and BD-700-1A11 airplanes, certificated in any category, having serial numbers (S/Ns) 9002 through 9704 inclusive and 9998.

## (d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

#### (e) Reason

This AD was prompted by a design review, which found that the burst pressure of the flexible hose used to vent oxygen from the high-pressure relief valve of the oxygen cylinder overboard is lower than the opening pressure of the high-pressure relief valve. This pressure difference could cause the flexible hose to burst before it is able to vent excess oxygen overboard. We are issuing this AD to prevent the accumulation of excess oxygen in an enclosed space, which could, if near a source of ignition, cause an uncontrolled oxygen-fed fire.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Modification

Within 2,500 flight hours or 42 months, whichever occurs first, after the effective date of this AD, incorporate Bombardier Modsum R700T400542 by replacing the oxygen flexible relief hoses for the crew oxygen bottles with new metal design hoses, in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (g)(1) through (g)(4) of this AD. Airplanes with serial numbers

listed in table 1 of paragraph 1, "Planning information," of the service information specified in paragraphs (g)(2) and (g)(4) of this AD have incorporated Modsum R700T400542 and meet the requirements of this paragraph.

- (1) For Model BD-700-1A10 airplanes having S/Ns 9002 through 9312 inclusive, 9314 through 9380 inclusive, and 9384 through 9429 inclusive: Bombardier Service Bulletin 700-35-013, Revision 01, dated July 22, 2015.
- (2) For Model BD-700-1A10 airplanes having S/Ns 9313, 9381, and 9432 through 9704 inclusive: Bombardier Service Bulletin 700-35-6001, Revision 01, dated July 22, 2015.
- (3) For Model BD-700-1A11 airplanes having S/Ns 9127 through 9383 inclusive, 9389 through 9400 inclusive, 9404 through 9431 inclusive, and 9998: Bombardier Service Bulletin 700-1A11-35-012, Revision 01, dated July 22, 2015.
- (4) For Model BD-700-1A11airplanes having S/Ns 9386, 9401, and 9445 through 9702 inclusive: Bombardier Service Bulletin 700-35-5001, Revision 01, dated July 22, 2015.

#### (h) Parts Installation Prohibition

As of the effective date of this AD, no person may install oxygen hoses in the low pressure/high pressure discharge system with part numbers listed in the "Used Part No." column of Section 3.A, "Kit," of the applicable service information specified in paragraphs (g)(1) through (g)(4) of this AD.

#### (i) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the applicable

service information identified in paragraphs (i)(1) through (i)(4) of this AD, which are not incorporated by reference in this AD.

- (1) Bombardier Service Bulletin 700-35-013, dated February 20, 2015;
- (2) Bombardier Service Bulletin 700-35-5001, dated February 20, 2015;
- (3) Bombardier Service Bulletin 700-35-6001, dated February 20, 2015; and
- (4) Bombardier Service Bulletin 700-1A11-35-012, dated February 20, 2015.

## (j) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO, ANE-170, FAA; or Transport Canada Civil

Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

# (k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2015-25, dated September 10, 2015, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-5459.

(2) For service information identified in this AD, contact Bombardier, Inc., 400

Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax

514-855-7401; email thd.crj@aero.bombardier.com; Internet

http://www.bombardier.com. You may view this service information at the FAA,

Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information

on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on March 30, 2016.

Victor Wicklund, Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

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